AFFORDABLE HOUSING CORPORATION OF LAKEWOOD 317 SAMPSON AVENUE LAKEWOOD, NJ 08701

REQUEST FOR COMPETITIVE PROPOSALS FOR ELEVATOR MAINTENANCE OF TRACTION ELEVATORS AT THE JOHN J. CURREY BUILDING AND PETER WARD TOWER

Scott E. Parsons, PHM Executive Director

PROJECT DESCRIPTION

SECTION I: GENERAL SCOPE

- 1. Provide competitive Proposal for full maintenance service on four (4) traction passenger elevators for a one-year period beginning June 1, 2024 and ending May 31, 2025. The John J. Currey elevators just went through substantial rehab/replacement in 2022 with the work being completed by Schindler Elevator.
- 2. Price to include all engineering, labor, materials, services, tooling and equipment necessary and incidental, to complete the work, as called for in the contract documents.
- 3. This service to include: preventive maintenance, service calls, repairs and tests as required by municipality with jurisdiction for these elevators. Service must be available twenty-four hour coverage, three hundred and sixty five days per year.
- 4. Walk-throughs will be scheduled as requested.
- 5. Any questions regarding the specifications, scope etc. must be submitted in writing to the AHCL and the answers will be sent to all bidders.
- 6. The elevator contractor will be responsible for all rules and regulations of the AHCL as may pertain to the site.
- 7. The elevator contractor will be responsible for all filings and permits, including fees, with the appropriate municipality.
- 8. In accord with the State of New Jersey Laws of 2004-A-13130, Ch 57, as of September 1, 2004 all parties doing business with public agencies in the State of New Jersey are required to be registered with the NJ State Department of the Treasury and to provide such agencies with a copy of their Business Registration Certificate before entering into a contractual agreement (formal contract, purchase order, etc.) with such agencies for the provision of services. The subject registration can be accomplished via the internet: http://www.nj.gov/dca/lgs/lpcl/busregis/nj-reg-a.pdf.

SECTION II: QUOTES

1. Proposals are due no later than <u>10:00am on April 23, 2024</u>. Send two copies in a sealed envelope.

To: AHCL

317 Sampson Avenue. Lakewood, NJ 08701

Attention: Scott E. Parsons
Executive Director

From: Contractor Name

Address

City-State-Zip Code Elevator Proposal

- 2. Proposals <u>must be submitted</u> on the attached form only.
- 3. Proposals shall be subject to existing conditions, scope, general conditions, clarifications and addendum, code of the jurisdiction of the work. All contractors are required to submit the information as to their capability to perform the work as outlined in the specifications.
- 4. Contractors must comply with all State and Federal Regulations which may govern the AHCL
- 5. Contractors not intending to bid are requested to send a letter "No-Bid".
- 6. The criteria for the award will include but is not limited to the following: Price, technical expertise, past experience, quality of proposed staffing experience and capability of contractor to execute the maintenance contract. Selection will not be based solely on the lowest price. See Section 1.04 on pages 7-8. Contractors response to section 1.04 is worth up to 25 points and price worth up to 25 points (maximum 50 total possible points).
- 7. All Prices quoted are firm and no escalations will be considered provided the contract is awarded within ninety (90) days of the due date.

- 8. The purchaser reserves the right to reject any and all submitted bids. The AHCL may accept other than the lowest bid and waive any informality regarding the opening of bids and the award of the contract.
- 9. Contractors will be required to provide satisfactory evidence that they have the necessary resources, experience, manpower and ability financially to complete the work in this contract in a timely manner.
- 10. Submission of proposal is considered evidence that the contractor has visited the site of the work and is knowledgeable of the site conditions, contract requirements, and all applicable codes.
- 11. Should any bidder find discrepancies or omissions in the contract documents, site conditions or code requirements that differ from the proposed work, or has any questions or doubts he shall contract the owner and submit his questions in writing at least seven days prior to the bid due date. No instructions, advice or interpretations or instructions will be given.
- 12. All bidders should be sure to include all costs and expenses, for the timely and satisfactory completion of the planned work, described in the contract documents.
- 13. All proposals should include all taxes, licenses, and fees necessary for the execution of the maintenance scope of work.

COMPETITIVE PROPOSALS FORM

Project Name	Elevator Mair	ntenance at the John . , Lakewood, NJ 087	J. Currey Building, 220 01
Submitted By			
	Contractor Name		
	Street Address		
	City	State	Zip Code
	Telephone Numbe	r	Fax Number
	r		
	Print Name of Authorized Representative		
	Email Address		

The Contractor has examined the Competitive Proposal Documents and the Job Site and is familiar with the scope and existing conditions; applicable code which Govern the work in Lakewood, New Jersey; Offers to provide the necessary labor, material, and engineering to execute the work required in the contact documents. The contractor offers to complete this work for the sum of:

A. Base bid includes full maintenance, repair and testing of four (4)

Traction Elevators for a one-year period beginning June 1, 2024 and ending May 31, 2025.				
	Dollars (\$)		
B. Five-year TEST LOA	D cost.			
	Dollars (\$)		
Attach information reques	sted in specifications section page.			
Date:				
Signature:				
Title:				
Name of Contractor:				
Address:				

TRACTION ELEVATOR MAINTENANCE SPECIFICATION FOR THE AHCL

PART 1 GENERAL

- 1.01 <u>Scope:</u> The work under this section is subject to those provisions of the General and Special Conditions which in any way affect the work herein specified.
- 1.02 This specification establishes the minimum requirements for a full maintenance program which shall be contracted for by the Owner with an approved bidder. The full maintenance contract shall cover the elevator equipment as set forth in Part 5 of this specification.
- 1.03 Contractor Competence and Qualifications: The Contractor shall be competent and experienced in the field of elevator service with a minimum of five (5) years prior experience on comparable or more complex elevator equipment and currently have service contracts on similar equipment. The Contractor must have a local elevator service office and demonstrate the ability to answer a service call within one (1) hour from receiving a call.

1.04 The Contractor shall include the following data in the bid document:

- A. A statement that the firm is regularly engaged in the business of installing, and/or servicing elevators of the type and character of equipment covered by this specification. A list of at least 5 similar contracts/references and contact information for such contracts shall be provided.
- B. A completed description and locations of the firm's employed by the bidder, whose responsibility is performing maintenance, giving the length of time each has been employed by the bidder and the amount of experience each has had in maintaining elevators of the same type and manufacture as covered by this specification.
 - 1. A list, including names of directly employed by the bidder, whose responsibility is performing maintenance, giving the length of time each has been employed by the bidder and the amount of experience each has had in maintaining elevators of the same type and manufacture as covered by this specification.
 - 2. An outline of service and warehousing facilities, showing a complete list of parts, equal to or better than original manufacturer's spare parts, on hand and of the same type and

- specifications as use on the elevators covered in this specification. Contractor agrees to allow the inspection of these facilities by Owner.
- 3. A description of any other factors concerning the bidder's maintenance program, personnel and service facilities that will substantiate his ability to properly maintain the elevators in a safe, dependable manner.
- 4. A list of technical information and engineering data in order to prove the technical capability to perform maintenance specified.

1.05 **INSURANCE**

Before commencing work, the Contractor and any subcontractor shall furnish the AHCL with certificates of insurance showing the following insurance is in force and will insure all operation under the Contract:

- 1. Worker's Compensation, in accordance with state Workers' Compensation laws. Employer liability coverage at limits of \$500,000/\$550,000/\$500,000.
- 2. Commercial General Liability with a combined single limit for bodily injury and property damage of not less than \$1,000,000.00 per occurrence to protect the Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others. This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under (3) below. If the Contractor has a "claimsmade" policy, then the following additional requirements apply: The policy must provide a "retroactive date" which must be on or before the execution date of the Contract; and the extended reporting period may not be less than five years following the completion date of the Contract. The AHCL is to be named as Additional Insured and that coverage includes Products/Competed Operations coverage.
- 3. Automobile Liability on owned and non-owned motor vehicles used on the site(s) or in connection therewith for a combined single limit for bodily injury and property damage of not less than \$1,000,000.00.
- 4. All insurance shall be carried with companies which are financially responsible and admitted to do business in the State of New Jersey. If any such insurance is due to expire during the contract period, the Contractor (including any subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to the Contracting Officer. All Certificates, as evidence of coverage, shall provide that no coverage

may be canceled or non-renewed by the insurance company until at least 60 days prior written notice has been given to the Contracting Officer. Al sub-contractors are required to provide the same coverage and limits as required by the contractor. The contractor/subcontractor should provide evidence of Umbrella Liability coverage and coverage limits, if applicable.

5. The Contractor must provide a Hold Harmless Clause with the same or similar wording as the following:

A) <u>Indemnification Agreement</u>

The Contractor will protect, defend, indemnify, and hold harmless the AHCL its officers, agents, and employees from and against any and all losses, penalties, damages, settlements, cost, charges, professional fees or other expensed or liabilities arising out of or resulting from the performance of the work or the completed operations provided that any such claims, damages, loss or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of the tangible property including the loss of the use resulting there from; and is cause in whole or in part by any negligent or willful act or omission of the Contractor, Subcontractor(s), Sub-subcontractor(s) and anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

In any and all claims against the AHCL or any of their agents or employees, by an employee of the Contractor, Subcontractor, or any Subcontractor, or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for any Contractor, Subcontractor, or any Subcontractor under Workmen's Compensation Acts, Disability Benefits Acts, or other Employee Benefits Acts.

1.06 Work Hours: All work shall be performed during regular working hours of regular working days unless otherwise specified. Any regular time or overtime work not otherwise included in the contract shall be billed to the Owner as an extra charge at the Contractor's prevailing labor rate. The following billing rates shall be set forth in the bid document:

	Regular Working Hrs. \$	Per Hrs. (One (1) Mechanic)		
	Regular Working Hrs. \$	Per Hrs. (Mechanic & Helper)		
	Overtime Working Hrs. \$	Per Hrs. (One (1) Mechanic)		
	Overtime Working Hrs. \$	Per Hrs. (Mechanic & Helper)		
	Sunday and Holidays. \$	Per Hr. (One (1) Mechanic)		
	Sunday and Holidays. \$	Per Hr. (Mechanic & Helper)		
1.07	Inspection of Equipment and Conditions at Job Site: Prior to bidding, it shall be the responsibility of the bidder to visit the job site and inspect each elevator to establish to his satisfaction the condition of the elevator equipment to be maintained and any other conditions affecting the work to be performed. This equipment is offered in an "as is" condition. No claim shall be allowed for correction of deficiencies claimed to exist prior to award of contract.			
1.08	reproducible wiring diagrams which take place during the c	<u>Wiring Diagrams:</u> Contractor shall provide to Owner a set of reproducible wiring diagrams covering all changes, modifications, etc., which take place during the contract team. These reproducible are to be furnished to the Owner immediately following modifications.		
1.09	day period the Contractor shareview performance and schenext ninety (90) day period.	Performance Conferences and Reports: At the end of each ninety (90) day period the Contractor shall meet with the Owner's representative to review performance and schedule major repairs contemplated during the next ninety (90) day period. The Contractor shall submit written performance reports on forms provided by the Owner at the end of each six (6) month period.		
1.10	Owner's representative prior completing the work. This re repair and callbacks. At time	Contractor's personnel shall check in with the to commencing work and check out after equirement applies to regular maintenance, of check-in, Owner's representative shall el with a list of any reported problems tion.		
1.11	regular monthly maintenance broke down by building name	ly billing shall be rendered by Contractor for service and any Owner approved extra work e, building number and elevator number mber where applicable. Lump sum billings		

- Time Sheets: A time sheet or ticket shall be submitted to the Owner for approval within twenty-four (24) hours of servicing or repairing and elevator unit. The time sheet or ticket shall include the date the work was performed, a description of the work performed and the elevator number the work was performed on along with the building name and number. In addition to these time sheets, the contractor shall keep on site for each elevator the following records: A) Traction Fluid Log which will indicate the date and amount of fluid was added; B) A log demonstrating that the contractor has tested the Fireman's Recall Phase 1 and 2 each month and the date of the test; C) A call log indicating the reason for the call and the steps taken to correct the problem.
- 1.13 Addition or Deletion of Elevator Units: Elevator units may be added during the contract term at a unit price agreed to by both parties. Deleted units shall reduce the contract price by the same amount as originally included in the Contactor's bid.
- 1.14 Equal Opportunity Employment Statement: The non-discriminatory clause contained in Section 202 Executive Order 11246, as amended by Executive Order 11375, relative to equal employment opportunity for all persons without regarding to race, color, religion, sex, or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein.

PART 2 SCOPE OF MAINTENANCE

2.01 This specification provides for complete maintenance coverage including examinations, cleaning, painting, lubrication, adjusting, parts replacement, repairs, and testing on all parts of the elevator equipment including but not limited to, machines, motors, motor starter, hydraulic power units, hydraulic power units, hydraulic pumps and valves, silencer, mufflers, controllers, selectors, relays, contactors, solid state devices, transformers, resistors, and all related control equipment.

It also includes, hydraulic plunger, bolster plate, jack packing, oil, guide rails, limit switches, guide shoes (slide and roller), door operators, car and hatch door hangers, contracts, interlocks, auxiliary door closing devices, detector-edges, photo eyes, car frames, platforms, and all other elevator related devices, except for the following:

Car enclosures (including removable panels, door panels, car gates, plenum chambers, hung ceilings light diffusers, light tubes and bulbs, handrails, mirrors, carpets, and tile flooring), hoist way enclosure, hydraulic cylinders and underground oil pipe lines, hoist way gates, door, frames and sills.

2.02 <u>Scheduled Maintenance:</u> All preventive maintenance performed by the Contractor shall be scheduled elevator by elevator and subject to final approval of the Owner.

The preventive maintenance schedule, as prepared by the contractor shall show building name, elevator serial numbers, examination frequency, examination hours and be keyed to a preventive maintenance schedule prepared for the specific equipment covered by this specification.

2.03 <u>Examine:</u> The Contractor shall examine the equipment on a monthly interval as set forth in Part 6 of this specification. When, as a result of an examination, corrective action is found to be the responsibility of the Contractor; the Contractor shall proceed immediately to make (or cause to be made) replacements, repairs and corrections. When such work is determined not to be the Contractor's responsibility, a written report, signed by the Contractor, shall be delivered to the Owner for future action.

Items of an emergency nature shall be communicated to the Owner Immediately and followed up in written form. Examinations of the equipment shall follow the basic procedures recognized by the elevator service industry.

- 2.04 <u>Clean:</u> The Contractor shall clean all of the elevator equipment as well as the elevator equipment room and hoist ways. Cleaning of the equipment shall occur at regular intervals sufficient in frequency to maintain a professional appearance and preserve the life of the equipment. Minimum interval shall be as set forth in Part 6 of this specification.
- 2.05 Paint: The Contractor shall paint the elevator equipment at intervals frequent enough to maintain a professional appearance, prevent rusting, and preserve the equipment. All paint shall be suitable for the purpose intended and be of a high quality. Application of the paint shall, in all circumstances, comply with applicable local codes and/or current ANSI codes.
- 2.06 <u>Lubricate</u>: The Contractor shall lubricate all moving parts of the equipment. Lubricants shall be applied at intervals recommended by the equipment manufacturer or as dictated through use of the equipment. All lubricants shall be suitable for the purpose intended and shall meet or exceed the minimum requirements specified by the manufacture of the equipment to which the lubricant is applied.
- 2.07 <u>Adjust:</u> The Contractor shall adjust the equipment. Adjustment shall be made as necessary and when the operation of the equipment varies from its normal or originally designed performance standards, as a result of normal wear and use. See Part 7 for performance standards.

Adjustments shall be made by qualified individuals properly equipped with tools and instruments, employed by the Contractor. Adjustments shall be made at regular intervals frequent enough to maintain the elevator in optimum operation condition.

Parts or assemblies which have worn (or otherwise deteriorate beyond "normal" adjustment limits shall be replaced as provided for under the "Replace" and/or "Repair" section of this specification.

- 2.08 Replace: The Contractor shall "replace" all items covered under the contract during the course of scheduled preventive maintenance, when in the opinion of Owner, such replacement will prevent and unscheduled elevator shutdown and/ or ensure the continued normal operation of the elevator or which otherwise will extend the useful life of the elevator. All replacements are made using original or Owner approved equal.
- 2.09 Replacement Parts: To assure the maximum use of elevators a minimum shutdown time for emergency repairs, the Contractor shall be required to have and maintain on the job, in metal cabinets furnished to have and maintain on the job, in metal cabinets furnished by the Contractor, a supply of spare parts sufficient for normal maintenance and repair of the elevators. These spare parts and lubricants shall be equal to or better than original manufacturer's parts. The value of the replacement parts maintained on the job shall be a minimum of 10% of the annual maintenance cost.

Motors, armatures, field coils, and any other component part must be delivered within forty-eight (48) hours of needed repair.

Used parts, or parts, that are not equal to or better than genuine manufacturer's parts are not acceptable and will not permitted. <u>Contractor to state</u>, before the signing of contract, any parts claimed to be obsolete. <u>During the term of this agreement</u>, the obsolesces clause can only be invoked, if prior written notice sent, by certified mail, 30 days prior to be need for replacement.

Obsolesces of parts must be manually agreed to by both parties. Absent agreement of obsolesces, the Building Owner reserves the right to cancel this contract.

2.10 Repairs:

A. Repairs which are the responsibility of the Contractor:

Repairs shall be made by the Contractor to elevator components covered by the agreement. The Contractor shall make (or cause to be

made) all repairs made necessary due to normal wear and use of the elevator system. The Contractor shall be responsible for all cost for labor, materials, expenses, and supplies which occur as a result of the stated repair.

B. Repairs which are the responsibility of the Owner.

Repairs shall be made by the Contractor, when authorized by the Owner, where such repairs are not included in the contract. The Contractor shall make (or cause to be made) all repairs made necessary for any reason during the term of the contract.

The Contractor shall supply all labor, materials, and supplies at the Contractor are usual billing rates. On completion of all repair work, the contractor shall submit to the Owner for payment an invoice detailing the nature of the work performed and related charges. The repair billing rate shall be set forth in the bid document.

Prior to any repairs being made by the Contractor, the Contractor shall submit a written proposal to the Owner to obtain formal approval to proceed.

- 2.11 Perform Periodic Test: The Contractor shall perform periodic Safety Tests of the elevator components. The periodic tests shall be conducted at the frequency stated in the ANSI A17.2 code, and or Municipality having jurisdiction, and follow the procedures set forth in said code. Test results shall be recorded on forms supplied by or acceptable to the Owner. Certified copies of the completed test forms shall be submitted to the Owner. Periodic inspections as performed by city, county, state, federal government and/ or insurance agencies or representatives are included in this specification.
- 2.12 <u>Callback Service:</u> For the purpose of this specification, a "callback" is a request from the Owner to the Contractor, requesting the Contractor to go to a specific elevator to correct any elevator problem and/or condition, which in the Owners' opinion needs attention before the Contractor's next scheduled preventive maintenance visit. Additionally, a "callback" is work which can ordinarily be performed by one person working alone at the job site for a period of time not exceeding two hours.

Work required in excess of the basic two hours and/or which requires a second person shall be considered "Repair" work and shall be governed by the "Repair" provisions and specifications set forth elsewhere in this specification.

A. Callback service during regular working hours:

The Contractor shall, without additional change to the Owner, provide callback service during the Contractor's regular working hours. The contractor shall respond to a callback within a minimum of one (1) hour will require immediate response.

B. Call back service during overtime working hours:

The Contractor shall provide 24-hour callback service at no additional cost to the Owner.

PART 3 CONTRACT TERMS

- 3.01 It is the Owner's intention to award a contract covering one-year contract period from June 1, 2024 through May 31, 2025 with an additional one-year option, with Board Approval, in accord with NJSA 40A: 11-15 Annotated.
- 3.02 <u>Termination or Suspension:</u> See attached AIA Document "Standard Form of Agreement" between Owner and Contractor (1987 Edition), Article 8 Termination or Suspension.
- Failure to Perform: Contractor shall guarantee all work required during the contract period for the duration of the contract, and for a period of ninety (90) days after the termination date. Should be Owner determine during the contract period or within thirty (30) days after termination that any required work has been performed improperly or not performed at all; the contractor shall, after mailing of written notifications by the Owner, correct said difficulty within fourteen (14) days. Failure to correct will be construed as default of the contract and the Owner may secure others to perform the services and deduct the cost of these services from the contractual amount due under the agreement.
- Award of Contract: The Owner reserves the right to accept or reject any and all bids and to waive any informality in bids. All qualified bids will be evaluated and acceptance shall be made of the bid(s) judged by the Owner to constitute the best value offered for the purpose intended.
- 3.05 <u>Commencement Date:</u> It is Owner's Intention to award a contract to become effective on June 1, 2024.

PART 4 CONTRACT EXCLUSIONS:

- 4.01 The Contractor shall not be responsible for the following:
 - A. Making other safety tests or installing new attachments on the elevators when recommended by insurance companies.
 - B. Making any alterations to the elevator equipment, including control circuits, without prior written approval from the Owner.
 - C. For the mail line power feeders and associated disconnect switches and breakers.
 - D. For the elevator components specifically excluded under Section 2.01.

PART 5 EQUIPMENT COVERED BY THIS SPECIFICATION:

<u>Elevator</u>	<u>Building</u>	<u>Type</u>
Passenger 1 & 2	John J. Currey	TRACTION
Passenger 1 & 2	Peter Ward Tower	TRACTION

6.01 <u>Traction Passenger and Service Elevator (Repair or replace all parts required at no additional change.)</u>

Frequency: 4 weeks (no less then monthly)

- 1. Clean and inspect power unit, control, valves, motor and belts.
- 2. Clean and inspect car top, operating switches, door operator and control, car door hangers, gibs, alarm bell, leveling, phone, and fire service.
- 3. Clean and inspect hoist way door hangers, interlocks, linkage, pick up assembly, door gibs, non-vision wing and hoist way switches.
- 4. Clean and inspect buffers and jack packing, clean pit, check travel cable loop.

5.

Frequency 8 weeks

- 6. Clean machine room, clean and adjust controller and selector contacts and relays.
- 7. Check car and hall fixture lamps, leveling and floor stops, alarm bell and emergency stop; inspect travel cable and retiring cam.

Frequency 12 weeks

8. Inspect leveling, limit switches, and check emergency light.

- 9. Inspect power drive (belts and coupling) and pump. Clean control.
- 10. Clean car and hall station contacts, check door closing force, check and lubricate safety edge linkage pins and adjust. Check car, hoist way hanger rollers, and adjust up thrusts.
- 11. Check motor bearings, transformers, rectifiers and timers.

Frequency 26 weeks

- 12. Check control and main line fuses, voltage readings, motor connections and overloads.
- 13. Check bolster plate and channels, hoist way switches and door closing devices.

Frequency 52 weeks

- 14. Check drive belt tension and adjust valves.
- 15. Clean guide rails and brackets, door hangers, sills and pit.
- 16. Annual pressure test and lubricate motor.
- 17. Filter hydraulic oil
- 18. Annual valve control adjustment and check logic operation.

Frequency 156 weeks

19. Three (3) year pressure test, where flexible hoses are present.

Frequency 5 years

19. Five-year Test Load.

PART 7 PERFORMANCE STANDARDS:

- 7.01 It is the intention of this specification that the elevator equipment be maintained so as to preserve the operating characteristics in line with the original design. Should the Owner find through its own investigation or that of its representative that these standards are not being maintained, the Contractor will be given fourteen (14) days to restore the performance to the required level. Failure by the Contractor to restore the performance to the required level within the fourteen (14) day period shall constitute sufficient cause for termination of the contact by reason of default, at the option of the Owner, in accordance with Section 3.02.
- 7.02 The following are performance levels which are a part of the original design and which shall be maintained at all times.

- A. Contract speed of all elevators, dumbwaiters, and lifts shall be maintained, and brake-to-brake (flight times shall be maintained as originally designed.
- B. Leveling accuracy of all elevators shall be maintained at all times.
- C. Opening and closing times of all hoist way and car doors shall be maintained within limits of ANSI A 17.1 Code, yet assuring minimum standing times at each floor.
- D. Door reversals on all elevators equipped with mechanical safety shoes shall always be initiated within the stroke of the shoe. Light ray devices shall be operable at all times under normal operation.
- E. "Variable" car and hall door hold open times shall be maintained in accordance with original design. Deviations from this will not permitted.
- F. Elevators operating under group supervisory systems shall operate at all times in accordance with original design specifications. The Contractor shall be required to periodically test these systems no less than annually and submit to the Owner test data indicating performance levels and proof that variable and fixed features are operating properly and all circuits and time setting are properly adjusted.
- G. Emergency fire service operation, telephone communications, emergency car light and alarm bell shall be periodically (minimum monthly) tested to be sure it is functioning properly as required by ANSI A17.1 Elevator Code.
- 7.03 As a minimum requirement the performance levels as set forth in item 7.02, Paragraph A, shall be as follows:

Hydraulic and Two Speed Control

1.	Flight Time (Brake-to-Brake)	9.6 seconds
2.	Cycle Time	15.6 seconds
3.	Door Open	2.5 seconds
4.	Door Close (Item 7.04, Para. D)	3.5 seconds

- 7.04 For the purpose of this specification, the following performance criteria shall apply:
 - A. Flight Time is the elapsed time in seconds from Brake open to brake close on a one (1) floor run of approximately 12'-0" and/or elevator starting after the interlock circuit is made and elevator stops at the next landing.

- B. Cycle Time is the elapsed time in seconds from car doors starting to close until the doors are fully open at the next floor on a one (1) floor run of approximately 12'-0"
- C. Door Open Time is the elapsed time in seconds from the time the car doors start to open after arriving at a landing until they are fully open.
- D. Door Close Time is the elapsed time in seconds from the time the car doors start to close after a call is initiated until they are fully closed with the interlock engaged. This must not exceed requirements as set forth in Rule 112.3 of the ANSI A17.1 Elevator Code; therefore, the Closing Time will vary slightly depending upon door opening width and weight of the doors,
 - 1. The performance levels as related to door time are based on center opening doors. Elapse time on single and two speed doors will be slightly longer.